

PUBLIC UTILITIES DEPARTMENT
CITY OF SAN DIEGO

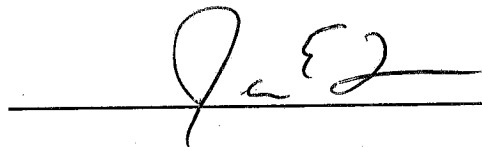
APPROVED MATERIALS LIST
FOR WATER



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**CITY OF SAN DIEGO
PUBLIC UTILITIES DEPARTMENT**

APPROVED MATERIALS LIST

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Forward for 2012 Revisions

- Suggested changes in the approved materials are still requested and will be reviewed. In order to keep the listing updated, it is necessary that anyone with pertinent information keep the committee updated.
- Materials other than shown on this list may be used when approval has been obtained for their use.
- Materials called out on subdivision plans may require specifications to be included with the subdivision plans. This will be the case of any material not covered by the referenced specifications* for the subdivision.
- Effective January 1, 2010, the State of California, Department of Toxic Substance Control, enacted a new law, *Requirements for Low Lead Plumbing Products in California*. The intent of this legislation is to reduce the lead content in plumbing components intended to convey or dispense water for human consumption.

“Lead free” means that the maximum allowed lead content is:

- 0.20 percent lead in solder and flux;
- 0.25 percent lead in wetted surfaces of pipes, pipe fittings, plumbing fittings and fixtures, as determined by a weighted average.

For more information on *Requirement for Low Lead Plumbing Products in California*, please visit the following web site:

<http://www.dtsc.ca.gov/PollutionPrevention/LeadInPlumbing.cfm>.

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WATER DISTRIBUTION

SUBJECT	SPEC. REF.	MANUFACTURER (Series/Model No.)	ADDITIONAL REQUIREMENTS
A. <u>Bronze Water Services Fittings for Iron Pipe, Plastic, and Copper Tubing</u> (1) Corporation Stop, Curb Stop, Property Valve, Coupling, Compression Fittings, or Flared Copper Type only. (2) Adaptors, Bends, Compression Fittings, or Flared Copper Type only. (3) Service Saddle (double-bronze straps and nuts for pipe other than PVC). (4) Service Saddle (full support for PVC C-900 pipe, 4" through 12", unless otherwise noted). All SStl. Saddles Bronze Saddle w/SStl.Strap	*207-26.1	(Refer to section G, page 7 for model numbers). The James Jones Company Ford McDonald Mueller The James Jones Company (J-979) Ford (202B) Mueller (H-16000) Romac Industries (202B) Smith-Blair (373) Romac Industries (306) Smith-Blair(323) Romac Industries The James Jones Company (J-969) APAC (113) Ford (202B)	Minimum 150 psi working pressure. Effective January 1, 2010, all pipe or plumbing fittings must be in compliance with a new law, <i>Requirements for Low Lead Plumbing Products in California</i> . Refer to page 2 for more details.

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SUBJECT	SPEC. REF.	MANUFACTURER (Series/Model No.)	ADDITIONAL REQUIREMENTS
B. Water Services			
(1) Polyvinyl Chloride Pipe (PVC)	*207-26.1		
With Schedules 40 & 80 socket solvent weld type fittings		Lasco Spears	
(2) Copper Tube, Type "K" (soft) 1" & 2" diameters	*207-26.1	Mueller Brass Cerro Copper Products Cambridge-Lee Industries, Inc.	

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SUBJECT	SPEC. REF.	MANUFACTURER (Series/Model No.)	ADDITIONAL REQUIREMENTS
C. Valves			
(1) Gate Valves 3" thru 48" diameter (a) All internal parts to be bronze (b) 12" diameter and larger to have by-passes 16" diameter and larger to be mounted horizontally with by-passes and enclosed gear cases 3" thru 12" diameter - 200 psi working pressure 16" thru 48" diameter - 150 psi working pressure	*207-26.3 AWWA C-500	Mueller (A2380-9206) Kennedy Valve Company/ Clow M & H (Dresser) K-Flow	EPDM rubbers
(2) Resilient-Wedge Gate Valves 2" thru 12" diameter (NRS)	AWWA C-509	M & H / Kennedy Valve Company./ Clow American AVK (Series 25) Stockham U. S. Pipe Metroseal (250) Mueller J&S Valve (Series 6600, 6800 and 6900)	EPDM rubbers Non-Rising Stem (NRS) for buried service Connections Flg x Flg Flg x MJ MJ x MJ
2" thru 66" diameter	AWWA C-515	American Flow Control (Series 2500) J&S Valve (Series 6600, 6800 and 6900)	EPDM rubbers Connections Flg x Flg Flg x MJ MJ x MJ

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SUBJECT	SPEC. REF.	MANUFACTURER (Series/Model No.)	ADDITIONAL REQUIREMENTS
C. Valves (cont.)			
(3) Rubber-Seated Butterfly Valves 6" thru 48" diameter	*207-26.4 AWWA C-504	Pratt K-Flow	Class 150 EPDM rubber
6" thru 12" diameter		M & H (Dresser) Mueller	EPDM rubber
		Kennedy Valve Company	EPDM rubber
16" thru 48" diameter	*207-26.4.1	Pratt K-Flow	Class 250 EPDM rubber
3" thru 120" diameter	*207-26.4 AWWA C-504, C111 & C-550	DeZURIK C/O CS-amsco	
(4) Combination Air & Vacuum Valves, 1", 2", 3", & 4" diameters All internal parts to be stainless steel		APCO (143C,145C,147C,149C) Val-Matic (201C, 202C) GA Industries, Inc.(#945) Crispin (10UL, 20UL, 30UL, 40UL)	
(5) Automatic Control Valves		CLA-VAL Co. GA Industries, Inc.	Globe/Angle Pattern only
(6) Standard Plug Valves (PEC) 100% Ported Plug Valves (PEF) 1/2" thru 72" diameter	*207-26.5 AWWA C-517, C-111, C-550	DeZURIK C/O CS-amsco (Models PEC & PEF)	

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SUBJECT	SPEC. REF.	MANUFACTURER (Series/Model No.)	ADDITIONAL REQUIREMENTS
C. Valves (cont.)			
(7) Fire Hydrants Wet Barrel Fire Hydrants for Ordinary Water Works Service	*207-26.2 AWWA C-503 SDW-104	Clow Ranger (950, 960, 850, 860)	Hydrants with one- piece barrel only, no welded ports allowed.
Sizes: 6" x 4" x 2.5" – 2 ports 6" x 4" x 2.5" x 2.5" – 3 ports	*207-26.2 AWWA C-503 & C-550 SDW-104	James Jones Co. J4040CR J4060CR	San Diego Drill Pattern 6-hole pattern with a 0.88 drilling on a 9.50 diameter bolt circle.
Sizes: 1-2.5" x 4" 2-2.5" x 4" 1-2.5" x 2-4"		American AVK Co. Model # 24-20 Model # 24-70 Model # 24-90	
(8) Polyethylene Air and Vacuum Valve Enclosure		Pipeline Products, Inc.	
Sizes: 18"x30" 14"x24"		VCAS 1830 VCAS 1424	

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<u>D. Meter Boxes</u>			
(1) Concrete Meter Box	*207-26.1 SDW 113	Brooks Products San Diego Precast Eisel Enterprises (Nos. 6 and 37)	
(2) Polymer-Concrete Meter Box		Armorcast Products CDR (1" only)	

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<u>E. Water Distribution Pressure Pipe</u>			
(1) Polyvinyl Chloride (PVC) Pipe Class 235 or 305 4" thru 12" diameter	*207-25 AWWA C-900	Any Manufacturer Meeting Specifications	Effective January 1, 2010, all pipes must be in compliance with a new law, <i>Requirements for Low Lead Plumbing Products in California</i> . Refer to page 2 for more details
(2) Ductile Iron (DI) pipe 4" thru 54" diameter	*207-9 AWWA C-111 AWWA C-104 AWWA C-105	Any Manufacturer Meeting Specifications	Marking - Pressure Class PVC 1120 NSF Certification Pipe ends - plain /gasket bell couplings
(3) Polyvinyl Chloride (PVC) Pipe 14" thru 36" diameter	*207-25.1 AWWA C-905 DR-18	Any Manufacturer Meeting Specifications	Pressure Rating 235 psi

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<u>F. Water Distribution</u> <u>Miscellaneous</u>			Effective January 1, 2010, all pipe or plumbing fittings must be in compliance with a new law, <i>Requirements for Low Lead Plumbing Products in California</i> . Refer to page 2 for more details
(1) Ductile Iron Fittings and Joints For DI & PVC pipe, short body, cement lined	*207-9 AWWA C-110 AWWA C-111 AWWA C-153	Any Manufacturer Meeting Specifications	Only mechanical joint fittings shall be used on PVC pipe
(2) Tapping Sleeve 4" thru 20" diameter		APAC (502) Baker (428) Ford (FTSC) Mueller (H619) Smith-Blair (622) JCM Industries (412) Romac Industries (FTS420)	Use on "existing system" only
(3) Stainless Steel Bands (Repair Clamps)		JCM (101, 210, 211, 301) Ford (FS1, FS2) Romac Industries (SS1, SS2) Cascade (CR1. CR2. CR3)	
(4) Flex Couplings		Mueller Romac Industries Couplings Style 501	
(5) Restraining Joints		Mega Lug StarGrip Romac Industries Grip Ring and Roma Grip	To be Approved by Engineer

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Refer to page 2 for more details

G. BRONZE WATER SERVICE FITTINGS ^(a)		COMPRESSION/PACKING	FLARED COPPER	MISCELLANEOUS
TYPE	SIZE	MANUFACTURER'S MODEL NUMBERS FORD JONES McDONALD MUELLER	MANUFACTURER'S MODEL NUMBERS FORD JONES McDONALD MUELLER	MANUFACTURER'S MODEL NUMBERS FORD JONES MUELLER
CURB STOP, ANGLE, BALL IPS THREAD TO METER PVC SCH 40 TO METER (elongated holes for 12" & 2" meters) TUBING TO METER TUBING TO METER (elongated holes for 12" & 2" meters)	2" 2"	--- BFA73-777W J-1979 4602B-44 ---	--- ---	FV13-777W J-1527F H-14286 --- ---
	1" 2"	BA43-444W J-1963W 4602B-22 B-24258 BF43-777W J-1975W 4604-B B-24276	BA23-444W J-1973W 4602B B-24255 BFA23-777W J-1964W ---	--- --- --- ---
	2" 2" 12" 2"	--- J-1943 3131-B --- FB-1102 J-1977 4704B-44 B-25025 FB-1100 J-1935 4704B-22 B-25008 FB-1100 J-1935 4704B-22 B-25028	--- FB-700 J-1930 4701B B-25000 FB-700 J-1930 4704B B-25025	FB-500 J-1943 H-9969 --- --- --- ---
COUPLING, ADAPTOR FIP TO IPS FIP TO PVC, IPS FIP TO TUBING MIP TO PVC, IPS MIP TO TUBING MIP TO TUBING	1" 2" 2" 2" 1" 2"	C16-44 J-2608 4754-33 H-15454 C17-44 J-2640 4754-44 C14-77 J-2607 4754-22 H-15451 C87-77 J-2640 4753-44 C84-44 J-2605 4753-22 H-15428 C84-77 J-2605 4753-22 H-15428	--- C21-77 J-1535 4754 H-15450 C28-44 J-1531 4753 H-15425 C28-77 J-1531 4753 H-15425	--- --- --- --- --- --- --- --- --- ---
	1" 1" 2" 2"	--- C77-77 J-2642 4758-44 --- C44-44 J-2609 4758-22 H-15403 C44-77 J-2609 4758-22 H-15403	--- C22-44 J-1528 4758 H-15400 C22-77 J-1528 4758 H-15400	C-38 J-130 H-10890 C-38 J-130 H-10890 --- --- --- ---
	1" 1" 2" 2"	---	---	---

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G. BRONZE WATER SERVICE FITTINGS ^ω		SIZE	COMPRESSION/PACKING	FLARED COPPER	MISCELLANEOUS
TYPE			MANUFACTURER'S MODEL NUMBERS FORD JONES McDONALD MUELLER	MANUFACTURER'S MODEL NUMBERS FORD JONES McDONALD MUELLER	MANUFACTURER'S MODEL NUMBERS FORD JONES MUELLER
PACKING JOINT, 90° ELBOW TUBING TO TUBING		2"	L44-77 J-2611 4761.22 H-15526	C22-77 J-1552 4761 H-15525	---
	VALVE, METER FIP TO METER	1"	B13-444 J-1908 6101-MHB B-24351 w/6120 w/B20248 HANDLE HANDLE	---	---

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